1. A method of treating a subterranean formation, comprising the steps of:

continuously injecting a fluid into the subterranean formation; and

periodically applying a pressure pulse having a given amplitude and frequency to the fluid while the fluid is being injected into the subterranean formation.

2. The method of claim 1 wherein the step of applying the pressure pulse is performed at about, or above, the earth's surface.

3. The method of claim 1 wherein the step of continuously injecting the fluid into the subterranean formation maintains a positive pressure in the subterranean formation.

4. The method of claim 1 wherein the amplitude of the pressure pulse is sufficient to stimulate hydrocarbon recovery from the subterranean formation.

5. The method of claim 4 wherein the amplitude of the pressure pulse is in the range of from about 100 psi to about 3,000 psi.

6. The method of claim 5 wherein the amplitude of the pressure pulse is below the fracture pressure of the formation.

7. The method of claim 1 further comprising the step of generating a pressure pulse having an amplitude different from the amplitude of a previous pressure pulse.

8. The method of claim 1 wherein the frequency is in the range of about 0.001 Hz to about 1 Hz.

9. The method of claim 1 wherein the amplitude of the pressure pulse is sufficient to fracture the subterranean formation.

10. A system for applying a pressure pulse to a subterranean formation, comprising:

means for continually injecting a fluid into the subterranean formation; and

means for periodically applying a pressure pulse having a given amplitude and frequency to the fluid while the fluid is being injected into the subterranean formation.

11. The system of claim 10 wherein the injection means comprises a positive head or positive displacement device.

12. The system of claim 11 wherein the positive head or positive displacement device comprises a pump.

13. The system of claim 10 wherein the pressure pulsing means comprises:

a housing;

a plunger disposed in the housing;

a power source for moving the plunger within the housing;

a fluid injection port through which the fluid is supplied into the housing; and

an outlet port through which the fluid exits the housing.

14. The system of claim 13 wherein the plunger has a hollow chamber in fluid communication with the fluid injection port through openings in the surface of the plunger, and the hollow chamber is in fluid communication with the outlet port through a plunger outlet.

15. The system of claim 14 wherein the pressure pulsing means further comprises a check valve in fluid communication with the hollow chamber.

16. The system of claim 14 wherein the power source is hydraulic or pneumatic.

17. The system of claim 14 wherein the pressure pulsing means applies a pressure pulse when the power source applies a downward force upon the plunger, causing the plunger to travel downward, and thereby compress the fluid in the housing.

18. The system of claim 17 wherein the amplitude of the pressure pulse generated may be varied by varying the downward force applied by the power source to the plunger.

19. The system of claim 17 wherein the amplitude of the pressure pulse may be controlled to within about 10 psi of a target pressure.

20. The system of claim 10 wherein the amplitude of the pressure pulse is sufficient to stimulate hydrocarbon recovery from the subterranean formation.

21. The system of claim 20 wherein the amplitude of the pressure pulse is in the range of from about 100 psi to about 3,000 psi.

22. The system of claim 10 wherein the frequency of the pressure pulse is a frequency sufficient to stimulate hydrocarbon recovery from the subterranean formation.

23. The system of claim 22 wherein the frequency is in the range of from about 0.01 Hz to about 1 Hz.

24. The system of claim 10 wherein the injection means and pressure pulsing means are located at about, or above, the earth's surface.

25. The system of claim 24 wherein the injection means is mounted to a wellhead of a wellbore which penetrates the subterranean formation.

26. The system of claim 24 wherein the injection means is remotely located to a wellbore penetrating the subterranean formation.

27. The system of claim 24 further comprising a network of conduits connecting the pressure pulsing means to a plurality of wellbores.

28. The system of claim 27 wherein the wellbores are separated from each other by a distance of up to about 640 acres.

29. A system for applying a pressure pulse to a subterranean formation comprising:

a pump for continuously injecting a fluid into the subterranean formation; and

a pressure pulse application device for applying a pressure pulse having a given amplitude and frequency to the fluid while the fluid is being injected into the subterranean formation, the pressure pulse application device comprising:

a housing comprising:

a fluid inlet port through which the fluid is supplied into the housing; and

a fluid outlet port through which the fluid exits the housing;

a fluid supply connected to the fluid inlet port;

a plunger disposed in the housing, wherein the plunger has a hollow chamber; and

a power source for moving the plunger.

30. The system of claim 29 wherein the pressure pulse application device generates a pressure pulse when the power source applies a downward force upon the plunger, causing the plunger to travel downward, and thereby compress the fluid in the housing.

31. The system of claim 29 further comprising a network of conduits connecting the fluid outlet port to a plurality of wellbores.

32. The system of claim 31 wherein the wellbores are separated from each other by a distance of up to about 640 acres.

33. The system of claim 29 further comprising a check valve in fluid communication with the hollow chamber.

34. The system of claim 29 wherein the power source is hydraulic or pneumatic.

35. The system of claim 29 wherein the amplitude of the pressure pulse generated may be varied by varying a downward force applied by the power source to the plunger.

36. The system of claim 35 wherein the amplitude of the pressure pulse may be controlled to within about 10 psi of a target pressure.

37. The system of claim 29 wherein the amplitude of the pressure pulse generated is sufficient to stimulate hydrocarbon recovery from the subterranean formation.

38. The system of claim 37 wherein the amplitude of the pressure pulse generated is in the range of from about 100 psi to about 3,000 psi.

39. The system of claim 29 wherein the pressure pulse is generated at a frequency sufficient to stimulate hydrocarbon recovery from the subterranean formation.

40. The system of claim 39 wherein the frequency is in the range of from about 0.01 Hz to about 1 Hz.

41. The system of claim 29 wherein the system is located at about, or above, the earth's surface.